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RAW SEQUENCE LISTING

DATE: 09/26/2002

PATENT APPLICATION: US/09/494,096A

TIME: 16:27:38

Input Set : A:\PAN-0046.app

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3 <110> APPLICANT: Bannon, et al.
5 <120> TITLE OF INVENTION: Methods and Reagents for Decreasing Clinical Reactions
6 to Allergy
8 <130> FILE REFERENCE: 2002834-0046
10 <140> CURRENT APPLICATION NUMBER: 09/494,096A
11 <141> CURRENT FILING DATE: 2000-01-28
13 <160> NUMBER OF SEQ ID NOS: 90
15 <170> SOFTWARE: PatentIn Ver. 2.1
17 <210> SEQ ID NO: 1
18 <211> LENGTH: 2032
19 <212> TYPE: DNA
20 <213> ORGANISM: Arachis hypogaea
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25 tgccaagtca tcaccttacc agaagaaaac agagaacccc tgcgcccaga ggtgcctcca 180
26 gagttgtcaa caggaaccgg atgacttgaa gcaaaaggca tgcgagtctc gctgcaacca 240
27 gctcgagtat gatcctcggt gtgtctatga tcctcgagga cacactggca ccaccaacca 300
28 acgttccccct ccagggggagc ggacacgtgg ccgccaaccc ggagactacg atgatgaccg 360
29 ccgtcaaccc cgaagagagg aaggaggccg atggggacca gctggaccga gggagcgtga 420
30 aagagaagaa gactggagac aaccaagaga agattggagg cgaccaagtc atcagcagcc 480
31 acggaaaata aggcccgagg gaagagaagg agaacaagag tggggaacac caggtagcca 540
32 tgtgagggaa gaaacatctc ggaacaaccc tttctacttc ccgtcaaggc ggttttagcac 600
33 ccgctacggg aacccaaaac gtaggatccg ggtcctgcag aggtttgacc aaaggtcaag 660
34 gcagtttcag aatctccaga atcacggtat tgtgcagatc gaggccaaac ctaacactct 720
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41 gcaagaggag agagggcaga ggcgatggag tactcgaggt agtgagaaca atgaaggagt 1140
42 gatagtcaaa gtgtcaaagg agcacgttga agaacttact aagcacgcta aatccgtctc 1200
43 aaagaaaggc tccgaagaag agggagatat caccaaccca atcaacttga gagaaggcga 1260
44 gcccgatctt tctaacaact ttgggaagtt atttgagggtg aagccagaca agaagaaccc 1320
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46 gctcccacac ttcaactcaa aggccatggt tatcgtcgtc gtcaacaaag gaactggaaa 1440
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48 ggacgaagac gaagaagagg aggggaagtaa cagagagggtg cgtaggtaca cagcgagggt 1560
49 gaaggaaggc gatgtgttca tcatgccagc agctcatcca gtagccatca acgettctct 1620
50 cgaactccat ctgcttggtc tcggtatcaa cgctgaaaac aaccacagaa tcttctctgc 1680
51 aggtgataag gacaatgtga tagaccagat agagaagcaa gcgaaggatt tagcattccc 1740
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53 tgctcgctcct caatctcaat ctcaatctcc gtcgtctcct gagaaagagt ctctgagaa 1860
54 agaggatcaa gaggaggaaa accaaggagg gaagggtcca ctcttttcaa ttttgaaggc 1920
55 ttttaactga gaatggaggc aacttggtat gtatcgataa taagatcacg cttttgtact 1980
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69 20 25 30
71 Lys Thr Glu Asn Pro Cys Ala Gln Arg Cys Leu Gln Ser Cys Gln Gln
72 35 40 45
74 Glu Pro Asp Asp Leu Lys Gln Lys Ala Cys Glu Ser Arg Cys Thr Lys
75 50 55 60
77 Leu Glu Tyr Asp Pro Arg Cys Val Tyr Asp Pro Arg Gly His Thr Gly
78 65 70 75 80
80 Thr Thr Asn Gln Arg Ser Pro Pro Gly Glu Arg Thr Arg Gly Arg Gln
81 85 90 95
83 Pro Gly Asp Tyr Asp Asp Asp Arg Arg Gln Pro Arg Arg Glu Glu Gly
84 100 105 110
86 Gly Arg Trp Gly Pro Ala Gly Pro Arg Glu Arg Glu Arg Glu Glu Asp
87 115 120 125
89 Trp Arg Gln Pro Arg Glu Asp Trp Arg Arg Pro Ser His Gln Gln Pro
90 130 135 140
92 Arg Lys Ile Arg Pro Glu Gly Arg Glu Gly Glu Gln Glu Trp Gly Thr
93 145 150 155 160
95 Pro Gly Ser His Val Arg Glu Glu Thr Ser Arg Asn Asn Pro Phe Tyr
96 165 170 175
98 Phe Pro Ser Arg Arg Phe Ser Thr Arg Tyr Gly Asn Gln Asn Gly Arg
99 180 185 190
101 Ile Arg Val Leu Gln Arg Phe Asp Gln Arg Ser Arg Gln Phe Gln Asn
102 195 200 205
104 Leu Gln Asn His Arg Ile Val Gln Ile Glu Ala Lys Pro Asn Thr Leu
105 210 215 220
107 Val Leu Pro Lys His Ala Asp Ala Asp Asn Ile Leu Val Ile Gln Gln
108 225 230 235 240
110 Gly Gln Ala Thr Val Thr Val Ala Asn Gly Asn Asn Arg Lys Ser Phe
111 245 250 255
113 Asn Leu Asp Glu Gly His Ala Leu Arg Ile Pro Ser Gly Phe Ile Ser
114 260 265 270
116 Tyr Ile Leu Asn Arg His Asp Asn Gln Asn Leu Arg Val Ala Lys Ile
117 275 280 285
119 Ser Met Pro Val Asn Thr Pro Gly Gln Phe Glu Asp Phe Phe Pro Ala
120 290 295 300
122 Ser Ser Arg Asp Gln Ser Ser Tyr Leu Gln Gly Phe Ser Arg Asn Thr
123 305 310 315 320

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125 Leu Glu Ala Ala Phe Asn Ala Glu Phe Asn Glu Ile Arg Arg Val Leu
126                               325                               330                               335
128 Leu Glu Glu Asn Ala Gly Gly Glu Gln Glu Glu Arg Gly Gln Arg Arg
129                               340                               345                               350
131 Trp Ser Thr Arg Ser Ser Glu Asn Asn Glu Gly Val Ile Val Lys Val
132                               355                               360                               365
134 Ser Lys Glu His Val Glu Glu Leu Thr Lys His Ala Lys Ser Val Ser
135                               370                               375                               380
137 Lys Lys Gly Ser Glu Glu Glu Gly Asp Ile Thr Asn Pro Ile Asn Leu
138 385                               390                               395                               400
140 Arg Glu Gly Glu Pro Asp Leu Ser Asn Asn Phe Gly Lys Leu Phe Glu
141                               405                               410                               415
143 Val Lys Pro Asp Lys Lys Asn Pro Gln Leu Gln Asp Leu Asp Met Met
144                               420                               425                               430
146 Leu Thr Cys Val Glu Ile Lys Glu Gly Ala Leu Met Leu Pro His Phe
147                               435                               440                               445
149 Asn Ser Lys Ala Met Val Ile Val Val Val Asn Lys Gly Thr Gly Asn
150                               450                               455                               460
152 Leu Glu Leu Val Ala Val Arg Lys Glu Gln Gln Gln Arg Gly Arg Arg
153 465                               470                               475                               480
155 Glu Glu Glu Glu Asp Glu Asp Glu Glu Glu Glu Gly Ser Asn Arg Glu
156                               485                               490                               495
158 Val Arg Arg Tyr Thr Ala Arg Leu Lys Glu Gly Asp Val Phe Ile Met
159                               500                               505                               510
161 Pro Ala Ala His Pro Val Ala Ile Asn Ala Ser Ser Glu Leu His Leu
162                               515                               520                               525
164 Leu Gly Phe Gly Ile Asn Ala Glu Asn Asn His Arg Ile Phe Leu Ala
165                               530                               535                               540
167 Gly Asp Lys Asp Asn Val Ile Asp Gln Ile Glu Lys Gln Ala Lys Asp
168 545                               550                               555                               560
170 Leu Ala Phe Pro Gly Ser Gly Glu Gln Val Glu Lys Leu Ile Lys Asn
171                               565                               570                               575
173 Gln Lys Glu Ser His Phe Val Ser Ala Arg Pro Gln Ser Gln Ser Gln
174                               580                               585                               590
176 Ser Pro Ser Ser Pro Glu Lys Glu Ser Pro Glu Lys Glu Asp Gln Glu
177                               595                               600                               605
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182 Phe Asn
183 625
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187 <211> LENGTH: 474
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189 <213> ORGANISM: Arachis hypogaea
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194 ccctgcgagc aacatctcat gcagaagatc caacgtgacg aggattcata tgaacgggac 180
195 ccgtacagcc ctagtccagga tccgtacagc cctagtccat atgatcggag aggcgctgga 240

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196 tcctctcagc accaagagag gtgttgcaat gagctgaacg agtttgagaa caaccaaagg 300
197 tgcattgtgcg aggcattgca acagatcatg gagaaccaga gcgatagggt gcaggggagg 360
198 caacaggagc aacagttcaa gagggagctc aggaacttgc ctcaacagtg cggccttagg 420
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204 <212> TYPE: PRT
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212 20 25 30
214 Gln Leu Glu Arg Ala Asn Leu Arg Pro Cys Glu Gln His Leu Met Gln
215 35 40 45
217 Lys Ile Gln Arg Asp Glu Asp Ser Tyr Glu Arg Asp Pro Tyr Ser Pro
218 50 55 60
220 Ser Gln Asp Pro Tyr Ser Pro Ser Pro Tyr Asp Arg Arg Gly Ala Gly
221 65 70 75 80
223 Ser Ser Gln His Gln Glu Arg Cys Cys Asn Glu Leu Asn Glu Phe Glu
224 85 90 95
226 Asn Asn Gln Arg Cys Met Cys Glu Ala Leu Gln Gln Ile Met Glu Asn
227 100 105 110
229 Gln Ser Asp Arg Leu Gln Gly Arg Gln Gln Glu Gln Gln Phe Lys Arg
230 115 120 125
232 Glu Leu Arg Asn Leu Pro Gln Gln Cys Gly Leu Arg Ala Pro Gln Arg
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235 Cys Asp Leu Asp Val Glu Ser Gly Gly Arg Asp Arg Tyr
236 145 150 155
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240 <211> LENGTH: 1524
241 <212> TYPE: DNA
242 <213> ORGANISM: Arachis hypogaea
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247 gaatgcgccg gcgtgcacct ctctcgctta gtcctccgcc gcaacgccct tcgtaggcct 180
248 ttctactcca atgtcccca ggagatcttc atccagcaag gaaggggata ctttggttg 240
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253 aacaacgaca accagcttga tcagttcccc aggagattca atttggtgg gaacacggag 540
254 caagagttct taaggtacca gcaacaaagc agacaaagca gacgaagaag cttaccatat 600
255 agcccatata gcccgcaaag tcagcctaga caagaagagc gtgaatttag ccctcgagga 660
256 cagcacagcc gcagagaacg agcaggacaa gaagaagaaa acgaagggtg aaacatcttc 720
257 agcggcttca cgccggagtt cctggaacaa gccttccagg ttgacgacag acagatagt 780
258 caaaacctaa gaggcgagac cgagagttaa gaagaggag ccattgtgac agtgagggga 840
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260 gaagatgaat atgaatacga tgaagaggat agaaggcgtg gcaggggaag cagaggcagg 960
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262 agatccccctg acatctacaa ccctcaagct ggttcactca aaactgccaa cgatctcaac 1080
263 cttctaatac ttaggtgggt tggacctagt gctgaatatg gaaatctcta caggaatgca 1140
264 ttgtttgtcg ctcactacaa caccaacgca cacagcatca tatatcgatt gaggggacgg 1200
265 gctcacgtgc aagtogtgga cagcaacggc aacagagtgt acgacgagga gcttcaagag 1260
266 ggtcacgtgc ttgtggtgcc acagaacttc gccgtcgctg gaaagtccca gagcgagaac 1320
267 ttcgaatacg tggcattcaa gacagactca aggcccagca tagccaacct cgccggtgaa 1380
268 aactccgtca tagataacct gccggaggag gtggttgcaa attcatatgg cctccaaagg 1440
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274 <211> LENGTH: 510
275 <212> TYPE: PRT
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283           20           25           30
285 Ile Glu Thr Trp Asn Pro Asn Asn Gln Glu Phe Glu Cys Ala Gly Val
286           35           40           45
288 Ala Leu Ser Arg Leu Val Leu Arg Arg Asn Ala Leu Arg Arg Pro Phe
289           50           55           60
291 Tyr Ser Asn Ala Pro Gln Glu Ile Phe Ile Gln Gln Gly Arg Gly Tyr
292   65           70           75           80
294 Phe Gly Leu Ile Phe Pro Gly Cys Pro Arg His Tyr Glu Glu Pro His
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297 Thr Gln Gly Arg Arg Ser Gln Ser Gln Arg Pro Pro Arg Arg Leu Gln
298           100          105          110
300 Gly Glu Asp Gln Ser Gln Gln Gln Arg Asp Ser His Gln Lys Val His
301           115          120          125
303 Arg Phe Asp Glu Gly Asp Leu Ile Ala Val Pro Thr Gly Val Ala Phe
304           130          135          140
306 Trp Leu Tyr Asn Asp His Asp Thr Asp Val Val Ala Val Ser Leu Thr
307 145          150          155          160
309 Asp Thr Asn Asn Asn Asp Asn Gln Leu Asp Gln Phe Pro Arg Arg Phe
310           165          170          175
312 Asn Leu Ala Gly Asn Thr Glu Gln Glu Phe Leu Arg Tyr Gln Gln Gln
313           180          185          190
315 Ser Arg Gln Ser Arg Arg Arg Ser Leu Pro Tyr Ser Pro Tyr Ser Pro
316           195          200          205
318 Gln Ser Gln Pro Arg Gln Glu Arg Glu Phe Ser Pro Arg Gly Gln
319           210          215          220
321 His Ser Arg Arg Glu Arg Ala Gly Gln Glu Glu Glu Asn Glu Gly Gly
322 225          230          235          240
324 Asn Ile Phe Ser Gly Phe Thr Pro Glu Phe Leu Glu Gln Ala Phe Gln
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